



BETTER LENDING AND BETTER CLIENTS: CREDIT BUREAU IMPACT ON MICROFINANCE

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Improve lending, improve lives

RAPID EXPANSION OF MICROFINANCE institutions (MFIs) has helped improve credit access for the poor throughout Latin America. Typically, MFIs do not require collateral, but rather rely on dynamic incentives to induce repayment. Clients who first borrow and repay small loans might gradually be offered larger lines of credit. Also, since MFIs often make group loans with joint liability, peer pressure and mutual insurance among group members can help ensure repayment. Through repeated transactions with a lender, borrowers can signal their credit worthiness to the institution, which leads to greater access to larger loans for the better clients.

As MFIs spread, competition increases, and bad borrowers who default on one loan might simply take their next loan from another MFI that is unaware of the bad credit history. Rising competition without information sharing among lenders typically leads to a worsening of repayment performance in the sector. In response, credit bureaus have been introduced to help create an open environment of credit information. This can allow lenders to identify good clients by providing information on the borrowers' repayment histories and levels of indebtedness. To date, little empirical work exists to indicate the degree to which an MFI's use of a credit bureau results in improvements in repayment performance or impacts the poor's ability to be selected for loans. Nor is there clear evidence of how client behavior changes once they know that their credit history is being used by the MFI.

One goal of microfinance is to serve the poor; it is important to learn if use of credit bureaus increases lending to the poor. BASIS research in Guatemala investigated how the introduction of a credit bureau impacted loan performance and the selection of new clients. The researchers also carried out an experiment to test for the effects that informing clients about the existence and function of credit bureaus has on those clients' behavior in the financial market.

Using knowledge

Génesis Empresarial is a large microfinance lender in Guatemala that disburses small-scale individual and group loans to a variety of clients. Loans generally are given to poor clients with a functioning business. In August 2001, this MFI began using CREDIREF, the credit bureau that covers much of Guatemala's microfinance sector. By January 2003, all the MFI's 39 branches had entered into the credit bureau system.

BASIS researchers sought to quantify the magnitude of the improvement in performance that resulted from using the credit bureau, and also to gain insight into client selection. Researchers used anonymous client- and loan-level data from the MFI's administrative files for loans disbursed from December 2000 to July 2005. The data provided information on a total of 102,000 individuals and approximately 278,000 loans.

Field work in 2003 indicated that the MFI's clients were not aware that a credit bureau existed. This lack

of client knowledge, combined with the staggered entry of the MFI's branches into credit bureau use, allowed for the quasi-experiment on the impact of credit bureau use on client selection and subsequent repayment behavior. In addition, the researchers sought to determine how loan performance and client characteristics continued to change as branches used the credit bureau. Finally, the researchers carried out a further experiment to analyze changes in borrower behavior once borrowers know that the MFI is using credit bureau information and is sharing information about clients with the members of the credit bureau.

Impact on loan performance

The administrative records showed that credit bureau use has a large and positive impact on loan performance. Before entry, the proportion of both individual and group loans in arrears was roughly stable, with the performance of group loans dominating that of individual loans. (Constancy of arrears before entry shows that there was no branch selection for entry, whereby the MFI would have selected for priority entry those branches with deteriorating performance.) After credit bureau information started to be used by credit agents in selecting new clients, the average percentage of individual loans with at least one late payment decreased from 67.2% for pre-credit bureau loans, to 52.8% for post-credit bureau loans. (See figure.)

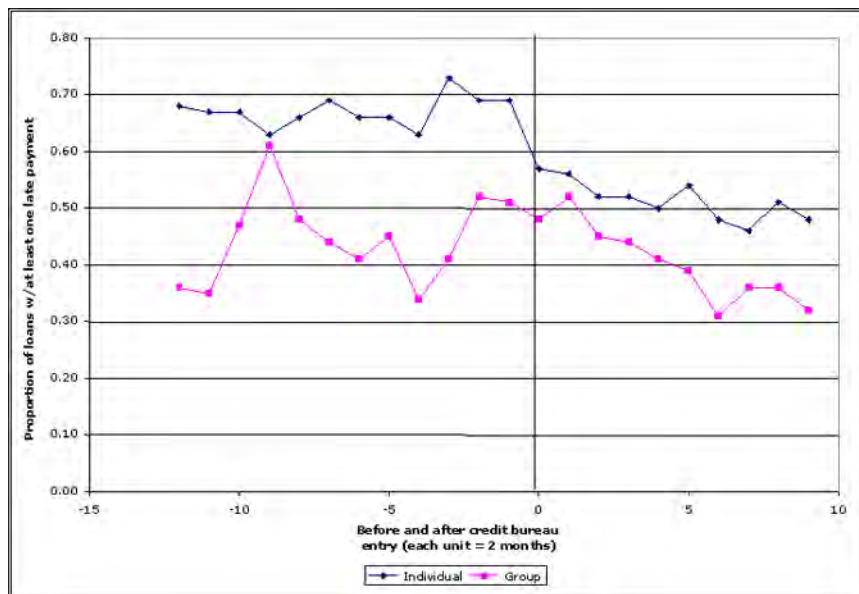
Though arrears on group loans decreased little, the significant decrease in arrears for individual loans suggests that use of the credit bureau information led to large efficiency gains for the MFI. Furthermore, arrears on individual loans continued to decrease for approximately two years, suggesting that use of the credit bureau continues to impact loan performance. For every two months after the entry, the proportion of loans in arrears is predicted to decrease by an additional 0.9 percentage points. The analysis indicates that credit bureau information was valuable to the credit agents in selecting clients and contributed to a decrease in arrears.

The decrease in late payments appears to result from the MFI's ability to better select among poorer clients. Before use of the credit bureau, 63% of all loans for clients with asset values less than 1,000 quetzales ("the poor") and 54% of loans for clients

with asset values greater than 1,000 quetzales ("the less-poor") had at least one late payment over the loan history). Thus, the performance of the poorer clients was substantially worse. Yet, after the MFI started using the credit bureau, 48% of loans for poorer clients and 48% of loans for the less-poor were in arrears.

Similarly, before use of the credit bureau, arrears for clients with business expenditures below 1,000 quetzales were 61%; for those with expenditures above 1,000 quetzales arrears were 54%. After the MFI began using the credit bureau, these percentages fell to 52% and 46% respectively. Although all the drops in arrears are significant, the change for poorer clients

Arrears pre- and post-credit bureau entry for individual and group loans



is substantially larger. Since the reduction is primarily driven by individual loans, and not group loans, the result shows that the MFI improved its selection of individual clients by using the credit bureau.

The amount of loans given out remained the same before and after the MFI began using the credit bureau; the MFI was simply selecting and lending to different groups of people. Researchers tested the robustness of the finding that the impact of the credit bureau on arrears is due entirely to selection. The majority of evidence suggests that credit bureau use had little impact on the repayment performance of established clients—those selected before use of credit bureau information. Therefore, the effect of the credit bureau on new clients likely occurs through selection.

Impact on client characteristics

It appears that the MFI used credit bureau information to replace bad, poor clients with either good, poor clients or good, less-poor clients. Use of the credit bureau is associated with a dramatic immediate increase in the wealth of new clients, as indicated by increases in average monthly business expenditures and average total asset value. Introduction of credit bureau information led to a large initial increase in average monthly business expenditures for clients taking individual loans from 1,000 to 3,000 quetzales. (During the period, the exchange rate was stable at approximately 8 quetzales per US dollar.) This initial increase is also seen for average total asset value, which increased from 4,000 to 14,000 quetzales.

There was a significant immediate increase in the business expenditure and total asset value of loan recipients in all quantiles (except for the asset value of the 80th quantile receiving group loans). Even in the lowest quantiles, there was an increase in the asset position and the business size of selected clients.

Although these figures bolster the findings that use of the credit bureau led to an initial move away from the poor, the MFI moved back toward the poor over time. After the initial entry, average business expenditures decreased significantly. Over a twenty-month period, average monthly business expenditures decreased from 2,250 to less than 1,500 quetzales. Average total asset value exhibited a similar trend by decreasing from 11,000 to nearly 3,000 quetzales. These trends suggest that the MFI began issuing loans to poorer clients, and that credit agents learned to work more effectively with the poor as time passed, making use of information provided by the credit bureau as one element of their selection process.

What clients know

As noted, the clients were initially unaware that the MFI was using a credit bureau to gain information on their borrowing histories. Eighteen months after the MFI began using the credit bureau, researchers trained a random selection of group borrowers on the purpose and function of credit bureaus; 163 community bank members and 207 solidarity group members received training, which emphasized who is sharing the information, what information is being shared, and how this can impact the clients. Community banks are relatively larger groups of poorer borrowers receiving very small loans; by contrast, solidarity

groups are smaller and composed of better-off individuals who receive larger loans.

Information about the credit bureau provided by the training resulted in a large decrease in delinquencies for solidarity group members, but no change in the delinquencies for community bank members. This latter group usually receives constrained loans as a way of maintaining the dynamic incentives to induce repayment, and they had very little access to other sources of loans. Information caused these members to dramatically increase their outside borrowing. Good, long-standing clients of the MFI showed the biggest increases in borrowing. Experienced borrowers were able to increase borrowing without incurring repayment problems, yet inexperienced clients ran into repayment problems with their new outside loans. Solidarity group members, conversely, exhibited good behavior on all loans, and did not become more indebted once they knew about the credit bureau.

Groups with past repayment problems that improved after training were the most likely to lose members. This seems to indicate that the departing members were disproportionately the worst at repaying loans. Trained groups, therefore, seemed to shed themselves of the “bad” members and were somewhat more reluctant to accept new members. Plus, there was a swing toward a higher share of men in trained groups.

In general, client information about the credit bureau had a substantial overall impact on behavior. Group repayment reporting fortified joint liability. Solidarity group clients appear to be positioning themselves to use their reputations in the future to move toward the more formal lending sector. Experienced community bank clients were able to achieve a dramatic decrease in credit constraints with no adverse effects. However, women and inexperienced clients suffered various adverse consequences.

Directions for policy

Guatemala is a poor country, with recent World Bank estimates showing that more than half the population lives in poverty. MFIs can play an important role in helping the rural poor gain access to credit lines to increase the productivity of their business endeavors and increase their incomes and consumption. In this effort, credit bureaus can help MFIs attract good clients that might not otherwise have entered the financial market.



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The analysis of the credit bureau's impact on loan performance and client characteristics at the MFI indicates both a substantial improvement in the performance of loans and a large *initial* shift away from the poor and toward wealthier clients. Use of the credit bureau led to a decrease in the proportion of loans in arrears, and arrears continued to decrease as branches continued to use the credit bureau. The decrease primarily results from the MFI's ability to better select poor clients, leading to large efficiency gains.

After the initial shift away from the poor, there is evidence that the MFI moved back towards the poor over time. It appears that credit agents were able to use the credit bureau information to better select clients from among the poor, the notably more difficult segment of potential clients to work with. This is a remarkable result that demonstrates the importance of credit bureau information in servicing more effectively a clientele of poor borrowers.

The results therefore bring both good news and a cautionary note. They are positive in that they show that credit bureau information allows MFIs to more effectively service the poor. Yet, they highlight that a number of poor individuals are initially screened out.

It is important that we understand which poor individuals are no longer offered loans. If they are indeed bad clients in the sense that they are likely to default because they refuse to pay even though they have sufficient resources or because they make overly-risky investments, then there is little cause for alarm. However, if they are individuals whose bad repayment record is a result of idiosyncratic shocks and not moral hazard, then MFIs must be careful in using credit bureau information.

Future research should work to understand which type of poor client is screened out as credit bureau information is used. If good poor clients are screened out because MFIs interpret repayment problems that are a consequence of idiosyncratic

shocks as resulting from moral hazard, then the credit bureau should expand the number of years for which it maintains client data. Currently, client data on a given loan is kept for only two years. Yet, if data were maintained for up to 10 years, for example, repayment problems resulting from idiosyncratic shocks would be more easily distinguished from those resulting from moral hazard. As more MFIs use credit bureaus, it is important that steps be taken to ensure that good poor clients are not unfairly denied access to loans if microfinance is to relax the credit constraints faced by the poor.

The research shows that when MFIs use credit bureaus, there is a strong decline in adverse selection in lending. By informing clients, the research was able to show that supporting the formation of bureaus while also disseminating knowledge about them is an inexpensive, rapid way to deepen credit access, bring down default rates, and open new opportunities to access credit for borrowers with a good repayment history that is now made available to all lenders.



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